Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) Inorganic, quasi-amorphous oxide compound of a metal, mixture of metals or semi conducting element, said compound having pyrolelectric properties.

2. (Original) The compound of claim 1 having the formula $(A_xB_{1-x})_pO_n$, wherein A and B are independently selected from transitions metals, elements of Group IVA of the periodic table, alkali metals, alkali earth metals and rare earth metals; x has values of between 0 to 1; p is an integer having the values 1, 2 or 3; and n is an integer having the value of 1, 2, 3 or 4.

3. (Original) The compound of claim 2, wherein A is a transition metal or an element of Group IVA of the periodic table, x is 1 and p is 2.

4. (Original) The compound of claim 1, having the formula $(A_xB_{1-x})(C_yD_{1-y})O_n$ wherein A and B are independently

selected from alkali metals, alkali earth metals, rare earth metals and elements of Group IVA of the periodic table; C and D are independently selected from transition metals and alkali earth metals; x and y have values of between 0 to 1; and n is an integer having the value of 1, 2 or 3.

5. (Original) The compound of claim 4, wherein A and B are independently selected from Ba, Sr, Ca, Pb, La, Eu, Li, Na, K and Cs ; C and D are independently selected from Ti, Zr, Nb, Ta, Sc, Mg and V; and n is 3.

6. (Original) The compound of claim 5, wherein A and B are independently selected from Ba, Sr, Ca, Pb, La and Eu.

7. (Original) The compound of claim 5, wherein A and B are independently selected from Li, Na, K and Cs.

8. (Original) The compound of claim 5, wherein C and D are independently selected from Ti and Zr.

9. (Original) The compound of claim 6, wherein C and D are independently selected from Ti and Zr.

10. (Original) The compound of claim 7, wherein C and D are independently selected from Ti and Zr.

11. (Original) The compound of claim 5, wherein C and D are independently selected from Nb, Ta, Sc, Mg and V.

12. (Original) The compound of claim 6, wherein C and D are independently selected from Nb, Ta and V.

13. (Original) The compound of claim 7, wherein C and D are independently selected from Nb, Ta and V.

14. (Original) Inorganic, quasi-amorphous compound of claim 4, wherein y=0 and having the formula $(A_xB_{1-x})DO_3$, wherein A, B, D and x are as defined in claim 4.

15. (Original) The compound of claim 4 having a pyroelectric coefficient of between about 10^{-12} C/(cm^2 x K) and about 10^{-7} C/(cm^2 x K).

16. (Original) The compound of claim 14 having a pyroelectric coefficient of between about 10^{-12} C/(cm^2 x K) and about 10^{-7} C/(cm^2 x K).

17. (Original) The compound of claim 4 selected from $BaTiO_3$, $CaTiO_3$, $PbTiO_3$, $Pb(ZrTi)O_3$, $Pb(Zr_{0.35}Ti_{0.65})O_3$, $(PbCa)TiO_3$, $(PbLa)(ZrTi)O_3$, $PbLaTiO_3$, $Pb(ScTa)O_3$, $Pb(ScNb)O_3$, $Pb(MgNb)O_3$, $SrTiO_3$, $(Sr_{0.65},Ba_{0.35})TiO_3$, $(Ba_{0.70},Sr_{0.30})TiO_3$ and $EuTiO_3$.

18. (Original) The compound of claim 17 having a pyroelectric coefficient of between about 10^{-12} $C/(cm^2 \times K)$ and about 10^{-7} $C/(cm^2 \times K)$.

19. (Original) The compound of claim 17 being selected from $BaTiO_3$, $PbTiO_3$ and $SrTiO_3$.

20. (Original) The compound of claim 18 being $BaTiO_3$.

21. (Currently Amended) A process for preparing pyroelectric compound, comprising applying a mechanical strain to a substantially amorphous compound of the formula $(A_xB_{1-x})(C_yD_{1-y})O_n$ ~~as defined in claim 4~~wherein A and B are independently selected from alkali metals, alkali earth metals, rare earth metals and elements of Group IVA of the periodic table; C and D are independently selected from transition metals and alkali earth metals; x and y have values of between 0 to 1; and n is an integer having the value of 1, 2 or 3, said mechanical strain being controlled so as to prevent

crystallization of said compound, thereby obtaining inorganic quasi-amorphous compound having pyroelectric properties.

22. (Original) The process of claim 21, wherein said mechanical strain is obtained by a temperature gradient.

23. (Currently Amended) The process of claim 21, wherein said amorphous compound has the formula $(A_xB_{1-x})DO_3$. ~~wherein A, B, D and x have the meanings as defined in claim 14.~~

24. (Currently Amended) Inorganic quasi-amorphous compound of the formula $(A_xB_{1-x})(C_yD_{1-y})O_3$ ~~as defined in claim 14~~ wherein A and B are independently selected from alkali metals, alkali earth metals, rare earth metals and elements of Group IVA of the periodic table; C and D are independently selected from transition metals and alkali earth metals; and x and y have values of between 0 to 1, preparable by the process of claim 21.

25. (Original) A device comprising the compound according to claim 1 in the form of a film coating on a substrate.

26. (Original) A device comprising the compound according to claim 4 in the form of a film coating on a substrate.

27. (Original) The device of claim 26, wherein the substrate is selected from Si, SiO_2 and glass.

28. (Original) The device of claim 27, wherein the thickness of the coating layer is below 0.5 micron.

29. (Original) A device comprising the compound of claim 1, the device being operable as a sensor for sensing an external field including at least one of the following: temperature field, magnetic filed and electric field.

30. (Original) A device comprising the compound of claim 4, the device being operable as a sensor for sensing an external field including at least one of the following: temperature field, magnetic filed and electric field.

31. (Original) A device having an acoustic wave propagation element including the compound of claim 1.

32. (Original) A device having an acoustic wave propagation element including the compound of claim 4.

33. (Original) A device having an acoustic wave propagation element including the compound of claim 5.

34. (Original) A birefringent medium comprising the compound of claim 1.

35. (Original) A birefringent medium comprising the compound of claim 4.

36. (Original) A device comprising the compound according to claim 1.

37. (Original) A device comprising the compound according to claim 4.

38. (Original) A device comprising a compound according to claim 3 in the form of a film coating on a substrate.

39. (Original) The device of claim 38, wherein the substrate is selected from Si, SiO_2 and glass.

40. (Original) The device of claim 39, wherein the compound is SiO_2.